in the community where this one was caught." 8, *Clemmys guttata,* Spotted Turtle. A turtle believed to be this species seen near the camp by Mr. Mattoon, May 15 (1904). 9, *Terrapene carolina,* Common Box Turtle. One found in the road near the camp, May 21 (1904), by Mr. H. R. Bristol. 10, *Eurycea rubra,* Red Salamander. One obtained by Mr. Mattoon May 16 (1904), and one seen May 11 (1905). 11, *Desmognathus fuscus,* Brown Salamander. Several young and larvae found May 15 and 16 (1904) in small brooks and pools. Eggs found near the camp by Dr. Graves May 10 (1904). 12, *Notophthalmus viridescens,* Pond Salamander. "Common Newt" and "Red Eft." One of the terrestrial form (*miniatus*) obtained by Mr. Mattoon May 11 (1904). Common in Little Brink Pond, May 14 (1904); a few seen elsewhere in creeks and ponds. Very abundant in Lake Mashipacong, May 8 (1904). 14, *Bufo americanus,* American Toad. Common in all suitable situations; examples seen daily. 15, *Rana palustris,* Pickerel Frog. Several noted May 11 and 16 (1904). 16, *Rana clamitans,* Green Frog. Common; several noted May 11 and 16 (1904).

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THE PRAIRIE RATTLER IN WESTERN AND CENTRAL NEW YORK.

The rediscovery of the prairie rattler in western New York and the extension of its range into central New York is worthy of note.

From records at hand, no specimens of *Sistrurus catenatus* have been recorded from western New York since 1853, when it was added to the faunal list by Gebhard, who received a specimen from Hon. Levi Fish of the town of Byron, N. Y., where it was taken in a white cedar swamp. DeKay in his "Fauna of New York" (42) describes this species as extra-limital. Nash ('08) in his "Vertebrates of Ontario," reports that they formerly occurred in the meadow lands at the western end of Lake Erie, but at that time were nearly extinct. For the last fifteen or twenty years the farmers in the vicinity of Bergen Swamp believed rattlers were present, but their identity was not known.

On June 2, 1917, while taking a botanical trip to the southeastern end of Bergen Swamp just beyond Bergen, N. Y., I had the opportunity to see two specimens of the prairie rattler, Dr. A. J. Eames of Cornell University, M. S. Baxter of Rochester Academy of Science, and myself, attracted by the fairly loud rattle of the snake, succeeded in taking one specimen, and I brought it back with me to the University Laboratory, where it was in captivity for a few days. The total length of the speci-

men is 18½ inches, and the tail, 2 inches. It possesses four well-developed rattles and a single button, the entire length of the rattle being 15/32 inch.

The second specimen seen was considerably longer, measuring at least 2½ feet. In both cases they were found exposed to the sun, in the hummocks of *Juncus* and *Cypripedium hirsutum* in the marly areas of the swamp.

In July, another specimen was recorded by myself in the sphagnum areas of Featherbed Swamp, Spring Lake (near Auburn), N. Y.

Later in the summer, E. E. Honey and W. L. C. Muenscher of Cornell University reported having stepped on one, in Bergen Swamp.

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THE COLORS OF FISHES.

A friend of the writer, interested in the coloration of fishes, has asked that he place on record a sketch of his knowledge and interpretation of their coloration.

In discussing their colors, it is a convenience to divide fishes into several groups.

1. Free swimming fishes are those which spend the greater part of their lives moving actively about in the water not far from the surface, approaching the bottom or floating weed or other floating objects comparatively rarely or by chance.

2. Bottom and weed fishes are those which spend much of their lives near the bottom or close to or among floating weed and other objects.

3. Reef fishes are those which spend the greater part of their lives moving actively in the water, near, or among, the intricacies of tropical reefs.

4. Deep-water fishes are those found at considerable depths.

The colors of free-swimming fishes are mostly simple, white beneath, silvery on the sides, bluish, greenish or brownish above, sometimes more or less mottled (Mackerel).

The colors of bottom and weed fishes are more strongly, often intricately, marked, generally neutral in tone paler below.

The colors of reef fishes are the brightest, most contrasted, their markings often bold and bizarre.

Deep water fishes can not be so successfully generalized as to color, but among them we find three types which are sufficiently prevalent to be worthy of discussion, a red type, and one in which almost the entire fish is of a dark lustrous silver, at moderate depths; and a black type in greater depths.

In the free-swimming group there doubtless is a correspondence between the color of the upper parts of the fish, and that